

What is claimed is:

1. An emulsion fuel comprising 55 to 90 % by weight of a heavy oil, 45 to 10 % by weight of water, and a small amount of a catalyst.
- 5 2. The emulsion fuel as defined in claim 1, wherein said catalyst is prepared by mixing caustic soda with calcium dichloride.
3. The emulsion fuel as defined in claim 2, wherein said catalyst comprises
10 50 % by weight of caustic soda and 50 % by weight of calcium dichloride.
4. The emulsion fuel as defined in claim 2, wherein said calcium chloride is partly substituted with calcium sulfate.
- 15 5. The emulsion fuel as defined in claim 1, wherein said catalyst is 0.3 to 0.8 % by weight.
6. The emulsion fuel as defined in claim 1, wherein said heavy oil is bunker fuel oil C or petroleum.
- 20 7. A method for preparing an emulsion fuel comprising the steps of:
mixing a composition comprising 55 to 90 % by weight of a heavy oil, 45 to 10 % by weight of water with a small amount of a catalyst; and
emulsifying the mixture with an emulsifier.
- 25 8. The method as defined in claim 7, wherein said catalyst is prepared by mixing caustic soda with calcium dichloride.
9. The method as defined in claim 8, wherein said catalyst comprises 50 % by
30 weight of caustic soda and 50 % by weight of calcium dichloride.

10. The method as defined claim 8, wherein said calcium chloride is partly substituted with calcium sulfate.

5 11. The method as defined claim 7, wherein said catalyst is 0.3 to 0.8 % by weight.

12. The method as defined claim 7, wherein said heavy oil is bunker fuel oil C or petroleum.

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13. A catalyst composition for preparing an emulsion fuel by emulsifying a mixture of a heavy oil and water, the composition comprising 50 % by weight of caustic soda and 50 % by weight of calcium dichloride.

15 14. A catalyst composition for preparing an emulsion fuel by emulsifying a mixture of a heavy oil and water, the composition comprising 50 parts by weight of caustic soda and 50 parts by weight of a mixture of calcium dichloride and calcium sulfate.

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